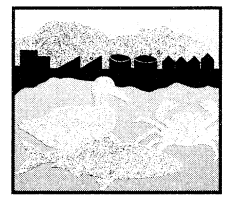
**Regional Water Quality Control Plant**

**Operated by the City of Palo Alto**
for the East Palo Alto Sanitary District,
Los Altos, Los Altos Hills, Mountain View,
Palo Alto, and Stanford



April 12, 2007

Mr. Bruce Wolfe, Executive Officer
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

**Re: Comments on Tentative Order for Mercury Discharges from Wastewater Discharges in the San Francisco Bay Region**

Dear Mr. Wolfe:

Thank you for the opportunity to comment on the Tentative Order for Mercury Discharges from Wastewater Discharges in the San Francisco Bay Region. The City of Palo Alto operates a regional wastewater treatment facility that discharges an average of 25 million gallons per day of treated wastewater to Lower South San Francisco Bay. The City of Palo Alto is committed to protecting San Francisco Bay, and we take special pride in the proactive leadership role that we have assumed with regard to pollution issues affecting the Bay. We have been engaged in mercury pollution prevention efforts for the past decade, and are currently very pleased to be observing decreases in mercury levels that we attribute to our mandatory dental amalgam control program.

We are supportive of the Mercury TMDL for San Francisco Bay, and we appreciate Regional Water Board staff's efforts to complete the TMDL and to begin moving forward with the TMDL's Implementation Plan. In general, our comments focus on improvements to the language of the Tentative Order that clarify the requirements or add flexibility when appropriate. However, we are very concerned that the inclusion of specific monitoring and reporting requirements in a Watershed Permit, such as the current Tentative Order for mercury, will inevitably lead to confusion when permit requirements conflict with dischargers' existing NPDES permits. **Therefore, we strongly suggest that any future such documents (e.g., one for cyanide) be combined with this one**. We appreciate your consideration of the following comments:

## 1. Monthly Mass Emission Calculation (page 13)

The formula provided for calculating a discharger's monthly mass emission uses the mercury concentration and discharger flow rate from the day of the sample, then multiplies the calculated mass value by 30.5 to obtain the monthly mass emission. This method of calculating the monthly mass emission allows the result to be strongly influenced by the flow on the day that the sample is collected. For



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example, a significant rainfall event that dramatically increased the flowrate on the sampling day could cause the calculated monthly mass emission for the entire month to be grossly overstated. It would be more accurate, and consistent with typical practices, to use the average effluent flowrate for the entire month in calculating the mass emission. This is the method for calculating monthly mass emission that is required by Palo Alto's individual NPDES permit, as follows:

> Monthly Mass Emission, kg/mo = 0.1154425*Q*C, where Q = monthly average effluent flow (MGD), and C = effluent concentration in µg/L
>
> If more than one concentration measurement is obtained in a calendar month, the average of these measurements is used as the monthly concentration value for that month.

**2. Action Plan for Trigger Exceedance (page 17)**

Provision C.1.c states "Each discharger who exceeds the applicable triggers listed in Table 10 or 11, above, shall comply with the following action requirements:" This sentence should read "..exceeds any of the applicable triggers..", as in Provision C.1.a.

**3. Action Plan for Trigger Exceedance: Comparison of Accelerated Monitoring Data with Triggers (page 17)**

Table 12 describes the requirements for conducting accelerated monitoring upon becoming aware of a trigger exceedance. The accelerated monitoring section states that the discharger should proceed with an action plan for mercury reduction if any of the four accelerated monitoring samples are above either the concentration or mass trigger. It is unclear how a single sample would be compared to the average monthly concentration trigger or the running annual mass emission trigger. The four sampling events required would most likely occur during two calendar months, so that in evaluating the compliance of the accelerated monitoring data with the triggers the discharger would evaluate four daily data points with the daily maximum trigger, two monthly data points with the average monthly trigger, and two monthly data points with the running annual mass emission trigger. We recommend that the Table 12 language referred to be changed to the following: "*...If the 4 samples collected during accelerated monitoring do not cause an additional exceedance of any of the applicable triggers, return to routine sampling. If the samples collected during accelerated monitoring cause an additional exceedance of any of the applicable triggers, proceed with action plan for mercury reduction and continue sampling monthly...*"

**4. Action Plan for Trigger Exceedance: Deadline for Submission of Action Plan for Mercury Reduction (page 17)**

Table 12 describes the requirements for an Action Plan for Mercury Reduction which must be developed, submitted, and implemented if accelerated monitoring

in response to an initial trigger exceedance indicates one or more additional trigger exceedances. The deadline for submission of the Action Plan is "Within 60 days of the initial trigger exceedance". 60 days is a wholly inadequate amount of time to prepare the required Action Plan. Most dischargers send effluent mercury samples to a contract laboratory that can attain the required low detection limits. Hence, the discharger may not even be aware that an exceedance occurred until three to four weeks from the sample date. At that time, the discharger must begin four weeks of accelerated sampling, the outcome of which determines whether or not to proceed with the Action Plan. It is very likely that the results of all four accelerated samples will not be known within 60 days of the original trigger exceedance.

The scope of the required Action Plan is broad, requiring consideration of the cause of trigger exceedance(s), evaluation of existing programs, the feasibility of technology enhancements to improve plant performance, and an implementation schedule. Preparation of such an Action Plan should not be required until the four weeks of accelerated sampling have confirmed the need to proceed with the Action Plan, and enough time should then be provided for preparation of a meaningful Plan. We recommend that the deadline for the plan in Table 12 be changed to "Within 6 months of completing accelerated monitoring".

**5. Effluent Monitoring Requirements: Requirement of Grab Samples for Methylmercury (page E-3)**

Table E-2 defines the mercury monitoring requirements. According to the table, total mercury samples may be collected as 24-hour composite or grab samples, but methylmercury samples must be collected as grab samples. Methylmercury samples should also be allowed to be collected as 24-hour composite or grab samples. Palo Alto collects total mercury as a 24-hour composite sample using ultraclean sampling methods. The contract laboratory analyzes this single sample for both total and methyl mercury. Utilizing one sample, be it a grab or composite sample, for both total and methyl mercury analyses decreases the chances of sample contamination and provides stronger data on the proportion of total mercury present in the methylated form. If the table is not changed to allow composite samples for methylmercury, we request that a footnote be included stating that the Executive Officer may approve composite samples upon request of the discharger.

**6. General Monitoring and Reporting Requirements: Duplication of Reporting Requirements**

Palo Alto is concerned about the continuing proliferation of duplicate requirements for reporting, and about the confusion that is caused by inclusion of and reference to multiple sets of standard provisions in NPDES permits. Using mercury as an example and assuming adoption of the current Mercury Watershed Permit, Palo Alto will be subject to the following reporting requirements:

- Monthly Self Monitoring Reports providing results of regular monitoring

- Monthly Discharge Monitoring Reports providing results of regular monitoring in EPA format
- Annual Self Monitoring Report due on Feb. 1 of each year to be submitted to the Regional Water Board's Executive Officer and to a Mercury Watershed Permit Reporting address
- Report on all mercury source control programs in annual Pollutant Minimization Program (PMP) report due on last day of February
- Annual Report on Advanced Mercury Source Control program due on last day of February
- Annual Report on Mercury Public Outreach and Pollution Prevention Programs as part of stormwater annual report

These duplicative reporting requirements use significant staff resources that are limited and could better be applied to implementing programs. New initiatives such as the Mercury Watershed Permit should attempt to minimize duplicative reporting to the extent possible. For instance, all of the necessary data used to calculate the mass loading values on the "Annual Mercury Information Reporting Form Part 2 of 3" (page E-10) are already submitted to the Electronic Reporting System (ERS) by those dischargers using the ERS. The mass loadings could easily be calculated by the Regional Water Board using the ERS information, or new fields could be added to the ERS allowing dischargers to submit monthly and rolling annual average mass emission data. If it is necessary to utilize the reporting form because some dischargers are not yet using the ERS, the form should include a footnote stating that it will be discontinued once all dischargers are using the ERS.

Similarly, the information requested on the "Annual Mercury Information Reporting Form Part 3 of 3" (page E-12) duplicates information that would already be included in the annual PMP report (Palo Alto's Clean Bay Plan) that is due on the last day of February. The Mercury Watershed Permit should simply require that PMP reports contain this information.

**7. General Monitoring and Reporting Requirements: Compliance With Multiple Sets of Standard Provisions and Reporting Requirements**

We are concerned that including specific monitoring and reporting requirements in Watershed Permits, such as the current Tentative Order for mercury, will inevitably lead to confusion when permit requirements conflict with dischargers' existing NPDES permits. Permit requirements for submittal of Self Monitoring Program (SMP) Annual Reports provide a useful example.

Palo Alto's existing NPDES permit requires submission of monthly SMP Reports and a SMP Annual Report. The SMP Annual Report is due on the last day of February. However, a provision of the permit states that the Annual Report need not be submitted if all data has been previously submitted electronically. Palo Alto participates in the ERS, and therefore is not required to submit a SMP Annual Report.

In the Mercury Watershed Permit, Section IV.B.2 of the Monitoring and Reporting Program states: "*The Dischargers shall submit mercury data collected as part of this Order in the regular monthly or quarterly Self Monitoring Reports, and in the annual Self Monitoring Reports required in the Discharger's individual permit...*" Section IV.B.5 then states: "*Additionally, for reporting in the annual Self Monitoring Report due February 1, each Discharger shall provide its mercury information on the forms shown at the end of this section (pages E-9 through E-13) as an attachment to the cover letter for the annual report...*" This permit language seems to say that mercury data must be submitted in the SMP Annual Report only if required by the individual permit, but then goes on to require submission of mercury information forms as an attachment to the annual report. Further complicating the situation, Section IV.C of the Monitoring and Reporting Program says that dischargers participating in Optional Group Compliance Reporting must provide the mercury information forms to the a regional entity by February 15th, but must indicate in the cover letter of the February 1st SMP Annual Report their commitment to participate in the Group Compliance Reporting.

While the Mercury Watershed Permit may be attempting to standardize sampling and reporting requirements for all dischargers, we believe that a pollutant-specific permit is the wrong place to do this. Inclusion of sampling and reporting language in the Mercury Watershed Permit, even if intended to be specific to mercury, will conflict with the provisions of individual permits and lead to confusion. This effect will be exacerbated if additional pollutant-specific watershed permit are adopted in the future. Specific language on monitoring and reporting should remain in individual permits or, if the Regional Water Board wishes to fully standardize permit language, in a general permit for municipal wastewater dischargers.

Thank you very much for your consideration of these comments.

Best regards,

Phil Bobel, Manager
Environmental Compliance Division